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TECH CENTER 1600/2900



1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/877,695

DATE: 11/21/2003

TIME: 11:07:44

Input Set : A:\16380-002001.txt

Output Set: N:\CRF4\11212003\I877695.raw

4 <110> APPLICANT: Desjarlais, John R.
6 <120> TITLE OF INVENTION: APPARATUS AND METHOD FOR DESIGNING
7 PROTEINS AND PROTEIN LIBRARIES
9 <130> FILE REFERENCE: 16380-002001
11 <140> CURRENT APPLICATION NUMBER: US 09/877,695
12 <141> CURRENT FILING DATE: 2001-06-08
14 <150> PRIOR APPLICATION NUMBER: US 60/266,711
15 <151> PRIOR FILING DATE: 2001-02-06
17 <160> NUMBER OF SEQ ID NOS: 4
19 <170> SOFTWARE: FastSEQ for Windows Version 4.0
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 34
23 <212> TYPE: PRT
24 <213> ORGANISM: Artificial Sequence
26 <220> FEATURE:
27 <223> OTHER INFORMATION: exemplary motif
29 <400> SEQUENCE: 1
30 Ser Leu Pro Ser Gly Trp Thr Gln Leu Thr Lys Ala Ser Asp Asp Thr
31 1 5 10 15
32 Thr Tyr Tyr Tyr Asn Lys Thr Thr Asp Val Val Thr Asn Thr Arg Pro
33 20 25 30
34 Thr Asp
37 <210> SEQ ID NO: 2
38 <211> LENGTH: 34
39 <212> TYPE: PRT
40 <213> ORGANISM: Artificial Sequence
42 <220> FEATURE:
43 <223> OTHER INFORMATION: exemplary motif
W--> 45 <221> NAME/KEY: VARIANT
46 <222> LOCATION: 1
47 <223> OTHER INFORMATION: Xaa = Ser, Asn, or Asp
W--> 49 <221> VARIANT
50 <222> LOCATION: 8
51 <223> OTHER INFORMATION: Xaa = Gln, Lys, Pro, Val, Glu, or Arg
W--> 53 <221> VARIANT
54 <222> LOCATION: 10
55 <223> OTHER INFORMATION: Xaa = Thr or Lys
W--> 57 <221> VARIANT
58 <222> LOCATION: 12
59 <223> OTHER INFORMATION: Xaa = Ala or Ser
W--> 61 <221> VARIANT
62 <222> LOCATION: 13
63 <223> OTHER INFORMATION: Xaa = Ser or Gly

ENTERED

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Input Set : A:\16380-002001.txt

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W--> 65 <221> VARIANT
 66 <222> LOCATION: 15
 67 <223> OTHER INFORMATION: Xaa = Asp, Asn, Glu, or Ser
 W--> 69 <221> VARIANT
 70 <222> LOCATION: 22
 71 <223> OTHER INFORMATION: Xaa = Lys or Gln
 W--> 73 <221> VARIANT
 74 <222> LOCATION: 24
 75 <223> OTHER INFORMATION: Xaa = Thr or Ser
 W--> 77 <221> VARIANT
 78 <222> LOCATION: 25
 79 <223> OTHER INFORMATION: Xaa = Asp or Asn
 W--> 81 <221> VARIANT
 82 <222> LOCATION: 27
 83 <223> OTHER INFORMATION: Xaa = Val or Lys
 W--> 85 <221> VARIANT
 86 <222> LOCATION: 31
 87 <223> OTHER INFORMATION: Xaa = Arg, Asn, or Gln
 W--> 89 <221> VARIANT
 90 <222> LOCATION: 34
 91 <223> OTHER INFORMATION: Xaa = Asp or Asn
 W--> 93 <400> 2
 W--> 94 Xaa Leu Pro Ser Gly Trp Thr Xaa Leu Xaa Lys Xaa Xaa Asp Xaa Thr
 95 1 5 10 15
 96 Thr Tyr Tyr Tyr Asn Xaa Thr Xaa Xaa Val Xaa Thr Asn Thr Xaa Pro
 97 20 25 30
 98 Thr Xaa
 101 <210> SEQ ID NO: 3
 102 <211> LENGTH: 34
 103 <212> TYPE: PRT
 104 <213> ORGANISM: Artificial Sequence
 106 <220> FEATURE:
 107 <223> OTHER INFORMATION: exemplary motif
 W--> 109 <221> NAME/KEY: VARIANT
 110 <222> LOCATION: 1
 111 <223> OTHER INFORMATION: Xaa = Ser, Asn, Asp, or Glu
 W--> 113 <221> VARIANT
 114 <222> LOCATION: 8
 115 <223> OTHER INFORMATION: Xaa = Gln, Lys, Pro, Val, Glu, Arg, or Asn
 W--> 117 <221> VARIANT
 118 <222> LOCATION: 9
 119 <223> OTHER INFORMATION: Xaa = Leu or Gln
 W--> 121 <221> VARIANT
 122 <222> LOCATION: 10
 123 <223> OTHER INFORMATION: Xaa = Thr or Lys
 W--> 125 <221> VARIANT
 126 <222> LOCATION: 12
 127 <223> OTHER INFORMATION: Xaa = Ala or Ser
 W--> 129 <221> VARIANT

RAW SEQUENCE LISTING

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Input Set : A:\16380-002001.txt

Output Set: N:\CRF4\11212003\I877695.raw

130 <222> LOCATION: 13
 131 <223> OTHER INFORMATION: Xaa = Ser or Gly
W--> 133 <221> VARIANT
 134 <222> LOCATION: 14, 25, 29, 34
 135 <223> OTHER INFORMATION: Xaa = Asp or Asn
W--> 137 <221> VARIANT
 138 <222> LOCATION: 15
 139 <223> OTHER INFORMATION: Xaa = Asp, Asn, Glu, or Ser
W--> 141 <221> VARIANT
 142 <222> LOCATION: 16
 143 <223> OTHER INFORMATION: Xaa = Thr or Ser
W--> 145 <221> VARIANT
 146 <222> LOCATION: 17
 147 <223> OTHER INFORMATION: Xaa = Thr or Val
W--> 149 <221> VARIANT
 150 <222> LOCATION: 19
 151 <223> OTHER INFORMATION: Xaa = Tyr or Phe
W--> 153 <221> VARIANT
 154 <222> LOCATION: 22
 155 <223> OTHER INFORMATION: Xaa = Lys, Gln, or Glu
W--> 157 <221> VARIANT
 158 <222> LOCATION: 24
 159 <223> OTHER INFORMATION: Xaa = Thr or Ser
W--> 161 <221> VARIANT
 162 <222> LOCATION: 26
 163 <223> OTHER INFORMATION: Xaa = Val, Thr, or Gln
W--> 165 <221> VARIANT
 166 <222> LOCATION: 27
 167 <223> OTHER INFORMATION: Xaa = Val, Lys, or Thr
W--> 169 <221> VARIANT
 170 <222> LOCATION: 28
 171 <223> OTHER INFORMATION: Xaa = Thr or Gln
W--> 173 <221> VARIANT
 174 <222> LOCATION: 31
 175 <223> OTHER INFORMATION: Xaa = Arg, Asn, or Gln
W--> 177 <400> 3
W--> 178 Xaa Leu Pro Ser Gly Trp Thr Xaa Xaa Xaa Lys Xaa Xaa Xaa Xaa Xaa
 179 1 5 10 15
 180 Xaa Tyr Xaa Tyr Asn Xaa Thr Xaa Xaa Xaa Xaa Xaa Xaa Thr Xaa Pro
 181 20 25 30
 182 Thr Xaa
 185 <210> SEQ ID NO: 4
 186 <211> LENGTH: 34
 187 <212> TYPE: PRT
 188 <213> ORGANISM: Artificial Sequence
 190 <220> FEATURE:
 191 <223> OTHER INFORMATION: exemplary motif
W--> 193 <221> NAME/KEY: VARIANT
 194 <222> LOCATION: 1

RAW SEQUENCE LISTING

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Input Set : A:\16380-002001.txt

Output Set: N:\CRF4\11212003\I877695.raw

195 <223> OTHER INFORMATION: Xaa = Ser, Asn, or Asp
W--> 197 <221> VARIANT
198 <222> LOCATION: 8
199 <223> OTHER INFORMATION: Xaa = Gln or Lys
W--> 201 <221> VARIANT
202 <222> LOCATION: 10
203 <223> OTHER INFORMATION: Xaa = Thr or Lys
W--> 205 <221> VARIANT
206 <222> LOCATION: 12
207 <223> OTHER INFORMATION: Xaa = Ala or Ser
W--> 209 <221> VARIANT
210 <222> LOCATION: 13
211 <223> OTHER INFORMATION: Xaa = Ser or Gly
W--> 213 <221> VARIANT
214 <222> LOCATION: (14)...(15)
215 <223> OTHER INFORMATION: Xaa = Asp or Asn
W--> 217 <221> VARIANT
218 <222> LOCATION: 17
219 <223> OTHER INFORMATION: Xaa = Thr or Val
W--> 221 <221> VARIANT
222 <222> LOCATION: 19
223 <223> OTHER INFORMATION: Xaa = Tyr or Phe
W--> 225 <221> VARIANT
226 <222> LOCATION: 22
227 <223> OTHER INFORMATION: Xaa = Lys or Gln
W--> 229 <221> VARIANT
230 <222> LOCATION: 24
231 <223> OTHER INFORMATION: Xaa = Thr or Ser
W--> 233 <221> VARIANT
234 <222> LOCATION: 25
235 <223> OTHER INFORMATION: Xaa = Asp or Asn
W--> 237 <221> VARIANT
238 <222> LOCATION: 27
239 <223> OTHER INFORMATION: Xaa = Val or Lys
W--> 241 <221> VARIANT
242 <222> LOCATION: 28
243 <223> OTHER INFORMATION: Xaa = Thr or Gln
W--> 245 <221> VARIANT
246 <222> LOCATION: 31
247 <223> OTHER INFORMATION: Xaa = Arg or Asn
W--> 249 <221> VARIANT
250 <222> LOCATION: 34
251 <223> OTHER INFORMATION: Xaa = Asp or Asn
W--> 253 <400> 4
W--> 254 Xaa Leu Pro Ser Gly Trp Thr Xaa Leu Xaa Lys Xaa Xaa Xaa Xaa Thr
255 1 5 10 15
256 Xaa Tyr Xaa Tyr Asn Xaa Thr Xaa Xaa Val Xaa Xaa Asn Thr Xaa Pro
257 20 25 30
258 Thr Xaa

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/877,695

DATE: 11/21/2003
TIME: 11:07:45

Input Set : A:\16380-002001.txt
Output Set: N:\CRF4\11212003\I877695.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; Xaa Pos. 1, 8, 10, 12, 13, 15, 22, 24, 25, 27, 31, 34
Seq#:3; Xaa Pos. 1, 8, 9, 10, 12, 13, 14, 15, 16, 17, 19, 22, 24, 25, 26, 27, 28, 29, 31, 34
Seq#:4; Xaa Pos. 1, 8, 10, 12, 13, 14, 15, 17, 19, 22, 24, 25, 27, 28, 31, 34

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/877,695

DATE: 11/21/2003

TIME: 11:07:45

Input Set : A:\16380-002001.txt

Output Set: N:\CRF4\11212003\I877695.raw

L:45 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:49 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:53 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:57 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:61 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:65 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:69 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:73 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:77 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:81 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:85 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:89 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:93 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:2
L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
M:341 Repeated in SeqNo=2
L:109 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:113 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:117 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:121 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:125 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:129 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:133 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:137 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:141 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:145 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:149 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:153 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:157 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:161 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:165 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:169 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:173 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:177 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:3
L:178 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
M:341 Repeated in SeqNo=3
L:193 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:197 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:201 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:205 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:209 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:213 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:217 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:221 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:225 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:229 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:233 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:237 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:241 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4

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DATE: 11/21/2003

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TIME: 11:07:45

Input Set : A:\16380-002001.txt

Output Set: N:\CRF4\11212003\I877695.raw

L:245 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:249 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:253 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:4
L:254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
M:341 Repeated in SeqNo=4